| **Practical Number** | 06 |
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| **Areas covered** | Single Dimensional Arrays |

1. Declare a Single dimensional array with 10 elements. Input the values to the array and find the followings;
2. Minimum value
3. Maximum value
4. Average value
5. Reverse order of values

#include<stdio.h>

int main()

{

int a[10],b,c=0,min,max;

for(b=0;b<=9;b++){

printf("Enter Value %d - ",b+1);

scanf("%d",&a[b]);

c=c+a[b];

}

min=a[0];

max=a[0];

for(b=1;b<=9;b++){

if(a[b]>max){max=a[b];}

if(a[b]<min){min=a[b];}

}

printf("\nMinimum Value - %d\n",min);

printf("Maximum Value - %d\n",max);

printf("Average Value - %.2f\n\n",(float)c/10.0);

printf("Reverse Order Of Values\n");

for(b=9;b>=0;b--){

printf("Value %d - %d\n",b+1,a[b]);

}

}

1. Declare two single dimensional arrays with the size given by the user and find, display the followings;

* Scalar Sum (Adding values of each element of an array)
* Vector Sum (Adding values of each relative elements of an array and store them in third array)

#include<stdio.h>

int main()

{

int h;

printf("Enter The Size For The Array 1 And Array 2 (Array 1 And Array 2 Both Should Have Equal Size) - ");

scanf("%d",&h);

int a[h],b[h],c,d,e,f[h];

printf("\nArray 1\n");

for(c=0;c<h;c++){

printf("Enter Value %d - ",c+1);

scanf("%d",&a[c]);

}

printf("\nArray 2\n");

for(c=0;c<h;c++){

printf("Enter Value %d - ",c+1);

scanf("%d",&b[c]);

}

d=a[0];

e=b[0];

for(c=1;c<h;c++){

d=d+a[c];

e=e+b[c];

}

printf("\nScaler Sum Of Array 1 - %d\n",d);

printf("Scaler Sum Of Array 2 - %d\n",e);

printf("Vector Sum Of Array 1 And Array 2 - ");

for(c=0;c<h;c++){

f[c]=a[c]+b[c];

printf("%d ",f[c]);

}

printf("\n");

}